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Cancer research shows promise for combating deadly lung cancer

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A study by researchers at Marshall University Joan C. Edwards School of Medicine has found that blocking the blood supply of small cell lung cancer tumors may help reduce their growth and delay the regrowth process after treatment. Small cell lung cancer is considered the most lethal of all lung cancers.

"We found that synthetic small molecules, MG624, block the tumor's ability to acquire blood supply," said Piyali Dasgupta, Ph.D., associate professor of pharmacology, physiology and toxicology at Marshall's school of medicine. "We are hopeful that this therapy, combined with other treatments, can delay cancer relapse and improve patient outcomes."

Dasgupta, biomedical sciences graduate student and incoming medical student Zachary Robateau, and other colleagues who worked on the study presented their findings Sunday at the 2016 Experimental Biology Conference in San Diego.

The research at Marshall is now continuing with another compound called Memantine to see if it has a similar effect on small cell lung cancer. Dasgupta says the use of Memantine, which is already approved by the Food and Drug Administration for use in dementia patients, has a lot of appeal because it's already used in clinics and is tolerated well by patients.

In addition to her study being highlighted, Dasgupta will lead a session at

the conference, "Molecular and Cellular Basis of Disease: From Prevention to Cancer Metastasis."

Also, Marshall graduate students Deborah Amos and Rachel Murphy received competitive travel awards from the American Society for Biochemistry and Molecular Biology to attend the conference.

The annual meeting attracts about 14,000 researchers and attendees from around the world including Marshall scientists from the Biomedical Sciences Graduate Program and the School of Medicine.

Provided by Marshall University Joan C. Edwards School of Medicine